

**Altai A3w Indoor 802.11ac 3x3 WiFi Access Point**

The Altai A3w Indoor WiFi Dual-band Access Point is designed to be used in Altai Super WiFi systems to provide the highest speed 2.4 GHz and 5 GHz dual-band dual-concurrent access coverage for indoor areas. It is capable of providing the highest possible data throughput and capacity that the 3x3 MIMO 802.11ac standards can offer.



**Super High Capacity Coverage**

Max. LOS Access	800 m (2.4 GHz) 600 m (5 GHz)
Max. Data Rate	450 + 1300 Mbps

**Altai A3w for Dual-band Micro Coverage**

The A3w has both a 2.4 GHz (3x3:3 802.11b/g/n) radio and a high capacity 5 GHz (3x3:3 802.11a/n/ac) radio which can be operated at the same time for 2.4 GHz and 5 GHz dual-band dual-concurrent access coverage. The dual-band operation not only provides the highest capacity up to 1.75 Gbps but also performs better in the less interfered 5 GHz frequency band.

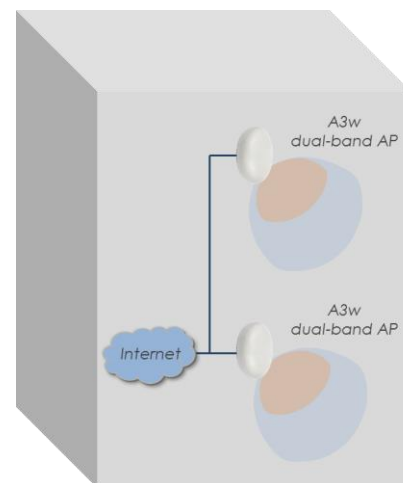
**Altai A3w for System Capacity**

As the indoor system capacity of an A8n network needs to increase, the A3w can be used to highly increase the user/throughput capacity at low cost. The A3w can be installed exactly at the indoor wall side where the capacity is required.



**Cost Effective Deployment**

The A3w WiFi Access Point provides the most cost effective and versatile way to enhance a Wi-Fi in terms of its capacity, coverage or range. When combined with the A8n Super WiFi Base Station, it can create possibly the most cost-effective high capacity Wi-Fi network system.



**As an integral part of our Super WiFi network infrastructure, key benefits of the Altai A3w include:**

- Carrier grade 802.11a/b/g/n/ac AP for indoor applications
- Multi-operating modes allowed: AP, bridge, repeater mode or CPE
- 3x3 MIMO in 3 streams for both 2.4 GHz (802.11b/g/n) and 5 GHz (802.11a/n/ac) radios
- 1300 Mbps (5 GHz) + 450 Mbps (2.4 GHz) high capacity
- Built-in 2.4 GHz and 5 GHz spatial polarized high gain panel antennas
- Increase system capacity under the coverage area of A8n Super WiFi Base Station
- Easy wall-mounted deployment
- User-friendly web-based management

## Wireless Interface

### 802.11b/g/n (3x3:3) Radio

- Operating Mode Access Point/CPE/Bridge/ Repeater
- Standard IEEE 802.11b/g/n
- Operating Frequency 2.400 – 2.484 GHz (Ch 1-13)
- Transmit Power 27 dBm (Max.)  
22 dBm (Per Chain)
- Receiver Sensitivity (Typical)
 

802.11b	11 Mbps	-90 dBm;	1 Mbps	-100 dBm
802.11g	54 Mbps	-79 dBm;	6 Mbps	-92 dBm
802.11n	HT20	-92 dBm;	HT40	-88 dBm

### 802.11a/n/ac (3x3:3) Radio

- Operating Mode Access Point/CPE/Bridge/ Repeater
- Standard IEEE 802.11a/n/ac
- Operating Frequency 5.150 – 5.350 GHz  
5.470 – 5.725 GHz  
5.725 – 5.850 GHz
- Transmit Power 27 dBm (Max.)  
22 dBm (Per Chain)
- Receiver Sensitivity (Typical)
 

802.11a	54 Mbps	-79 dBm;	6 Mbps	-93 dBm
802.11n	HT20	-94 dBm;	HT40	-90 dBm
802.11ac	VHT20	-93 dBm;	VHT40	-90 dBm
	VHT80	-87 dBm		

### For both 2.4 and 5 GHz

- 32 SSID (Max. 16 SSID per Radio)
- 802.11h\*, 802.11k\*, 802.11r\*, 802.11v\*, 802.11w\*
- Hotspot 2.0
- Altai AirFi™ Throughput Optimization
- Band Steering
- WMM (802.11e)

## Antenna

### 2.4 GHz Antenna

- Built-in Antenna 9 dBi Panel
- Frequency 2.4 – 2.5 GHz
- Polarization 3x3 MIMO Diversity Polarized
- Horizontal Beamwidth 55°
- Vertical Beamwidth 75°
- VSWR 2 (Max.)
- Impedance 50 Ω
- Front-to-back Ratio -20 dB (Max.)

### 5 GHz Antenna

- Built-in Antenna 9 dBi Panel
- Frequency 5.150 – 5.875 GHz
- Polarization 3x3 MIMO Diversity Polarized
- Horizontal Beamwidth 55°
- Vertical Beamwidth 55°
- VSWR 2 (Max.)
- Impedance 50 Ω
- Front-to-back Ratio -20 dB (Max.)

## Networking

- Switch (Bridge) and Gateway Mode
- IPv4/ IPv6 Dual-stack
- NAT
- DHCP Client/ Server
- PPPoE Client
- VPN (IPsec)\*
- VLAN
- Bandwidth Control Per VAP/ Client
- Multicast Rate Filter/IGMP Snooping

## Security

- Authentication – Open system, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, 802.1x (EAP-PEAP/ TLS/ TTLS/ SIM/ AKA)
- Encryption – WEP, TKIP, AES
- Inter/ Intra-client Isolation
- MAC-based Access Control (White/ Black List)
- RADIUS
- Active directory
- Firewall\*
- WIPS\*

## Management

- Cloud or Server-based Management by AltaiCare
- Controller-based Management by Access Controller
- Web User Interface
- Command Line Interface (SSH)
- SNMP v1/ v2c / v3\*
- MIB2/ IF-MIB/ Altai Enterprise MIB
- Syslog
- Auto Channel Selection and TX Power Control
- Spectral Analysis\*
- KPI Monitoring\*
- Client OS Detection\*

## Physical Specification

- Dimension 230 x 230 x 66 mm
- Weight 1.2 kg (Unit Weight)
- Mounting Wall-mounted
- Network Interface 2 x 10/100/1000 Mbps Ethernet Port

## Power Supply

- Power Supply 802.3at PoE PD or 56V Passive PoE PD
- Power Consumption 10 W (Typical) / 25 W (Max.)

## Environmental Specification

- Operating Temperature 0 °C to +50 °C (Ambient)
- Storage Temperature -40 °C to +80 °C
- Humidity 5 to 95% (Non-condensing)

## Certification

- FCC / CE / Others\*

## Product Ordering Information

### Standard Package

- A3w Indoor Dual-band 3x3 802.11ac AP with Built-in 2.4 GHz and 5 GHz Panel Antennas (Model No.: WA3311NAC-W)
- Mounting Accessories
- PoE Injector or AC Adaptor (optional)

### Contact Us

- Email: sales@altaittechnologies.com

A3w-PB-170224

\* Will be available in future.

The coverage range will be varied depending on NLOS and interference conditions. The transmit power may be varied according to country regulation. Although Altai has attempted to provide accurate information in these materials, Altai assumes no legal liability for the accuracy and completeness of the information. All specifications are subject to change without notice.